

Asbestos & the Flooring Industry

Responsibilities

Additional controls for Class II asbestos-containing floor materials and their associated mastics are contained within 29 CFR 1926.1101(g)(8)(i).

Are respirators required to be worn when removing asbestos-containing floor materials and their associated mastics?

Yes, until the employer has created a valid negative exposure assessment (NEA) or if the floor materials are being removed in a "non-intact" state regardless of air monitoring results. If an employer utilizes the work practices and engineering controls specified by 29 CFR 1926.1101 and the "Occupational Exposure to Asbestos - Flooring Industry Settlement Agreement", the floor material remains substantially intact and employee exposures are below all permissible exposure limits (PEL's), then respiratory protection may not be required. However, good industrial hygiene practices may warrant the use of them.

What type of decontamination facilities are required for Class II asbestos-containing floor material abatement projects?

Provided that the floor materials being abated are removed substantially intact without "mechanical chipping", decontamination facilities will not be required. If the materials do not stay "substantially intact" and require the use of a negative pressure enclosure pursuant to 29 CFR 1926.1101(g)(5)(i) or if the PEL's are exceeded and/or a NEA can't be created for the project, the use of an "equipment room or area" as specified by 29 CFR 1926.1101(j)(2) is required.

What type of training is required to perform Class II asbestos-containing floor material abatement projects?

The "worker" training shall include, at a minimum, all elements of paragraph (k)(9)(viii) and the specific work practices and engineering controls set forth in paragraph (g) which specifically relate to the category of material being removed (i.e., vinyl floor tile, linoleum, etc.). The training shall be at least eight hours in length and include "hands-on" training.

The "competent person" training, where the floor materials are removed utilizing compliant work practices and the material remains "substantially intact" during removal, shall be a minimum of twelve hours in length and cover all of the topics specified in the "Occupational Exposure to Asbestos - Flooring Industry Settlement Agreement's Appendix A, Sections 1 through 14."

The aforementioned worker and contractor/supervisor training shall be provided by "a knowledgeable person (i.e., a person who qualifies as a 'competent person' for the particular type of asbestos work addressed in the training)." It is recommended that this training be provided by an EPA or Michigan approved training provider.

How must asbestos-containing floor materials be disposed?

During Class II asbestos-containing floor material abatement projects, pursuant to 29 CFR 1926.1101(l)(2), "asbestos waste, scrap, debris, bags, containers, equipment, and contaminated clothing consigned for disposal shall be collected and disposed of in sealed, labeled, impermeable bags or other closed, labeled, impermeable containers." MIOSHA regulations do not address disposal regulations. The Michigan Department of Environmental Quality, Air Quality Division, enforces the National Environmental Standard for Hazardous Air Pollutants (NESHAP) which address waste shipment records and proper disposal methods.

The MDLEG - Asbestos Program performs the following services:

- Approves asbestos-related training courses.
- Accredits professionals in the asbestos abatement industry.
- Licenses asbestos abatement contractors.
- Maintains databases of approved trainers, licensed contractors, accredited individuals, and asbestos projects.
- Investigates asbestos-related compliance issues.
- Reviews AHERA management plans.

For additional information, please contact us at:

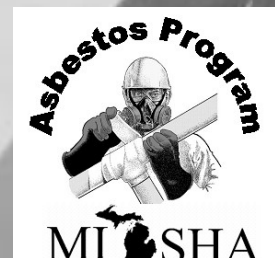
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New 05/23/06

FORM # MIOSHA-CSH-N17 Pink



Asbestos Awareness Training must be provided annually

This brochure is provided as a general summary of the responsibilities of the flooring industry in regard to employee training.

Background

Asbestos is the name of a group of naturally occurring minerals that can separate into microscopic needle-like fibers. The most common of these minerals are *Chrysotile*, *Amosite*, and *Crocidolite*. Once released into the atmosphere, the size and shape of these fibers permit them to remain airborne for long periods of time and thus contaminate the building environment.

If inhaled, these needle-like fibers can cause three specific asbestos-related diseases: *Asbestosis* (a fibrous scarring of the lungs), *Lung Cancer*, and *Mesothelioma* (a cancer of the lining of the chest or abdominal cavity). These diseases do not develop immediately after inhalation of asbestos fibers and typically have a latency period ranging from 15 to 30 years and sometimes as long as 40 to 50 years from first exposure before symptoms appear.

Asbestos-Containing Materials (ACM)

Asbestos has been used in more than 3,000 different products over the last 100 years primarily because of its thermal insulating, fire retardant, and chemical resistant properties. Some common products in buildings that contain asbestos include but are not limited to pipe insulation, floor coverings, ceiling tile, spray-on insulation, boiler wrap insulation, wall coverings, fire doors, and old electrical wire insulation. Employees, tenants, and custodial maintenance workers may be exposed to ACM during maintenance, renovation, or disturbance activities.

Flooring Industry Settlement Agreement

On February 28, 1995, the State of Michigan adopted the OSHA Asbestos Construction Standard (29 CFR 1926.1101) and all subsequent amendments by reference. On June 15, 1995, federal OSHA entered into a Settlement Agreement with flooring industry representatives. This agreement permits flooring removal contractors to make negative exposure assessments, and thereby avoid work-site monitoring, when:

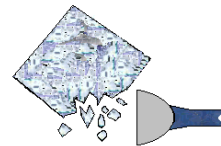
1. removal is conducted in strict compliance with certain work practices;
2. the employees are properly trained; and
3. a competent person determines that the material being removed is intact. Intact as defined in the MIOSHA Construction Standard means ACM that has not crumbled, been pulverized, or otherwise deteriorated so that the asbestos is no longer likely to be bond with its matrix.



The Settlement Agreement also modifies the requirement for competent person training involving flooring removal work. Instead of the 40-hour training generally required, the competent person who supervises removal of 'intact' flooring material must receive at least a 12-hour training course. The course topics are listed in Appendix A of the Agreement. If the flooring material is not removed intact or if other work practices are used, the competent person must receive the full 40-hour training.

The work practices required to qualify for the exceptions are listed below:

- Before removal begins, the entire floor is vacuumed using a HEPA vacuum with a metal floor attachment.
- Each floor tile is pried up individually using a stiff bladed scraper. If a tile does not release from the adhesive when the scraper is forced under the tile by hand, the scraper may be struck with a hammer to cause the tile to release and/or the tile may be heated (e.g. using a hot air gun) to soften the adhesive and facilitate removal.
- Alternatively, without first prying up floor tiles using a scraper, heat is applied to the floor tile from a heat source (e.g. infrared heat machine) and the tiles are removed by hand or by using a scraper.
- After the tile is removed, it is placed in a heavy-duty impermeable trash bag or other closed leak-tight container without further breakage.
- As small areas of floor are cleared of tile, residual adhesive is removed, to the extent necessary to prepare the surface for installation of new flooring material, by being wetted and scraped using a stiff bladed floor scraper.
- Alternatively, after the tile is removed, residual adhesive is removed by using a low speed floor machine and wetted sand or a removal solution.
- The area from which the adhesive has been removed is vacuumed using a HEPA vacuum with a metal floor attachment.
- After the entire floor has been removed and has dried, it is vacuumed using a HEPA vacuum with a metal floor attachment.



Questions & Answers

This clarification is in response to questions pertaining to asbestos-containing vinyl and/or asphalt floor material removal projects (i.e., engineering controls, training, respiratory protection, etc.). The following clarifications are not intended to supersede any provision of the MIOSHA Asbestos Construction Standard (29 CFR 1926.1101) or any other state or federal laws.

What "Class" is floor tile removal?

The removal of asbestos-containing flooring materials and their associated mastics is considered as Class II under the MIOSHA Asbestos Construction Standard (29 CFR 1926.1101).

Are negative pressure enclosures required to remove vinyl and/or asphalt floor materials?

When the methods utilized are deemed as "mechanical chipping," "aggressive" in nature as specified in the Flooring Industry Settlement Agreement, or the flooring material is being removed in a non-intact state, then a negative pressure enclosure pursuant to 29 CFR 1926.1101(g)(5)(i) is required.

What is meant by "mechanical chipping" pursuant to 29 CFR 1926.1101(g)(8)(i)(F)?

First, because the term "mechanical" is not defined within 29 CFR 1926.1101, we must refer to a standard dictionary definition of the term. "Mechanical" is commonly defined as "Of or pertaining to machines or tools." Further, a "tool" is commonly defined as "Any hand-held implement (i.e., hammer, saw, drill, etc.) used to accomplish work." Therefore, when any type of tool or implement (i.e., long handled hand-held spud) is utilized in the removal of vinyl and/or asphalt floor material, the work is considered to be "mechanical" in nature.

Secondly, because the term "chipping" is not defined within 29 CFR 1926.1101, we again must refer to a standard dictionary definition of the term. "Chipping" is commonly defined as "To break a small piece from; to chop or cut with an ax or other implement." Therefore, when small pieces, dust, and debris originating from the floor material are generated as a result of the removal, it may be considered as "chipping."

Are you required to provide written notification to the MDLEG prior to conducting asbestos-containing floor material removal projects?

No, provided that the method utilized to perform the removal does not render the floor material friable (i.e., an asbestos-containing material that can be crumbled, pulverized, or reduced to powder with hand pressure).

Is clearance/post-abatement air sampling required on Class II floor material abatement projects?

No, unless the method utilized to perform the removal rendered the floor material friable, the project was conducted utilizing a full negative pressure enclosure, and the quantity of material removed exceeded 15 square feet. If all three of these events were to occur, then at least one clearance/post-abatement air sample would be required.

What work practices are required to remove asbestos-containing floor materials and their associated mastics?

All asbestos-containing product removal operations have generic requirements specified at 29 CFR 1926.1101(g)(1). Further, the general work practices and engineering controls required for the Class II removal asbestos-containing floor materials and their associated mastics are specified by 29 CFR 1926.1101(g)(7).